

What is claimed is:

1. An LSI device comprising:

an SOI substrate having a SOI layer including a core region
to which a first driving voltage is applied and an interface
5 region to which a second driving voltage higher than the first
driving voltage is applied;

a device separation region for separating the SOI layer
into the core region and the interface region, wherein a
thickness of the SOI layer of the core region is thinner than
10 a thickness of the SOI layer of the interface region,

a plurality of first MOSFETs formed in the core region
and in which the SOI layer of the above core region is a fully
depleted Si channel; and

a plurality of second MOSFETs formed in the interface
15 region and in which the SOI layer of the above interface region
is a fully depleted Si channel.

2. The LSI device according to claim 1, wherein a channel
length of the first MOSFET formed in the core region is made
shorter than a channel length of the second MOSFET formed in
20 the interface region.

3. The LSI device according to claim 1, wherein a
thickness of the SOI layer of the above core region is 30 nm
or less.

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